

**TRIBHUVAN UNIVERSITY
INSTITUTE OF ENGINEERING
PULCHOWK CAMPUS**



Submitted by:

Name: Chandan Kumar Shah
Roll No: 080BCT023
Department: III/I

Submitted to:

Department of Electronics
and Computer Engineering

index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Chandan Shah - AI Engineer Portfolio</title>
    <link rel="stylesheet" href="style.css">
</head>
<body>
    <!-- Header Section -->
    <div class="header">
        <div class="container">
            <h1>CHANDAN SHAH</h1>
            <p class="subtitle">AI Engineer | Autonomous Agent Specialist | Multi-Agent Systems Expert</p>
            <div class="contact-info">
                <p>Kathmandu, Nepal | +977-9866010612</p>
                <p>
                    <a href="mailto:letsradheshah@gmail.com">letsradheshah@gmail.com</a> |  

                    <a href="https://linkedin.com/in/chandan-shah" target="_blank">LinkedIn</a> |  

                    <a href="https://github.com/chandan11248" target="_blank">github.com/chandan11248</a>
                </p>
            </div>
        </div>
    </div>

    <!-- Professional Summary Section -->
    <div class="section">
        <div class="container">
            <h2>Professional Summary</h2>
            <p class="summary">
                Computer Engineering student specializing in autonomous AI agents and multi-agent systems wi...
            </p>
        </div>
    </div>

    <!-- Technical Skills Section -->
    <div class="section gray-bg">
        <div class="container">
            <h2>Technical Skills</h2>

            <div class="skill-category">
                <h3>Agentic AI & Multi-Agent Systems</h3>
                <p>LangChain (Expert) • LangGraph Agent Architectures • Multi-Agent Coordination • Autonomous...
            </div>

            <div class="skill-category">
                <h3>LLMs & AI Development</h3>
                <p>OpenAI GPT-3.5/4 • Anthropic Claude • Prompt Engineering • RAG (Retrieval-Augmented Generat...
            </div>

            <div class="skill-category">
                <h3>ML & AI Fundamentals</h3>
                <p>PyTorch • Transformer Architecture • Embeddings • Reinforcement Learning Concepts • Natural...
            </div>

            <div class="skill-category">
                <h3>Development & Integration</h3>
                <p>Python (Advanced) • FastAPI • RESTful API Design • Webhooks • API Integration & Orchestrat...
            </div>

            <div class="skill-category">
                <h3>Data & Knowledge Systems</h3>
                <p>Vector Databases (Pinecone, ChromaDB, FAISS) • Embedding Models • Knowledge Graph Integrat...
            </div>

            <div class="skill-category">
                <h3>Orchestration & Deployment</h3>
                <p>n8n Workflow Automation • Multi-step Task Planning • Error Handling & Retry Logic • Monito...
            </div>
        </div>
    </div>

    <!-- Key Projects Section -->
```

```

<div class="section">
    <div class="container">
        <h2>Key Projects</h2>

        <div class="project">
            <h3>Autonomous Multi-Agent Research & Execution System</h3>
            <p class="tech-stack">LangChain • LangGraph • n8n • OpenAI API • Python</p>
            <ul>
                <li>Architected autonomous AI agent with reasoning, planning, and multi-step task execution logic</li>
                <li>Implemented multi-agent collaboration using LangGraph for parallel task delegation, coordination, and resource allocation</li>
                <li>Integrated tool usage capabilities (web scraping, API calls, data summarization) with n8n</li>
                <li>Deployed production-ready orchestration using n8n with comprehensive error handling, monitoring, and logging</li>
                <li>Built self-correction mechanisms enabling agents to evaluate outputs and iteratively refine their actions based on feedback</li>
            </ul>
        </div>

        <div class="project">
            <h3>Enterprise RAG Chatbot with Intelligent Document Querying</h3>
            <p class="tech-stack">LangChain • Pinecone/ChromaDB • FastAPI • OpenAI Embeddings</p>
            <ul>
                <li>Developed Retrieval-Augmented Generation (RAG) system enabling natural language querying of structured documents</li>
                <li>Engineered semantic search using vector embeddings to minimize hallucinations and improve retrieval accuracy</li>
                <li>Built RESTful API using FastAPI for seamless integration with web platforms and third-party systems</li>
                <li>Optimized context window management and prompt engineering strategies for complex multi-turn conversations</li>
                <li>Implemented evaluation metrics to track agent performance, detect drift, and ensure model reliability over time</li>
            </ul>
        </div>

        <div class="project">
            <h3>Agentic Workflow Automation Platform</h3>
            <p class="tech-stack">n8n • LangChain Agents • Claude API • JavaScript • Python</p>
            <ul>
                <li>Designed intelligent automation workflows integrating LLMs with decision-making logic and workflow engines</li>
                <li>Created agent memory systems and context persistence across multi-turn interactions for long-term planning</li>
                <li>Implemented real-time monitoring dashboards tracking agent performance, success rates, and system uptime</li>
                <li>Developed sophisticated orchestration layers coordinating multiple specialized agents and services</li>
                <li>Built scalability testing framework ensuring system reliability under production load and high concurrency</li>
            </ul>
        </div>

        <div class="project">
            <h3>Custom GPT-2 Transformer Implementation from Scratch</h3>
            <p class="tech-stack">Python • PyTorch • NumPy</p>
            <ul>
                <li>Implemented full GPT-2 architecture (124M parameters) from first principles, demonstrating deep learning and AI engineering skills</li>
                <li>Manually coded tokenization pipelines, multi-head self-attention layers, and feed-forward networks</li>
                <li>Applied reinforcement learning concepts and AI planning algorithms to optimize model performance and efficiency</li>
            </ul>
        </div>
    </div>

```

<!-- Education Section -->

```

<div class="section gray-bg">
    <div class="container">
        <h2>Education</h2>
        <div class="education">
            <h3>Bachelor of Engineering in Computer Engineering</h3>
            <p class="institution">Tribhuvan University, Institute of Engineering, Pulchowk Campus – Lalitpur, Nepal</p>
            <p class="date">Expected 2028</p>
            <p><strong>Relevant Coursework:</strong> Artificial Intelligence • Machine Learning • Data Structures & Algorithms • Operating Systems • Database Systems</p>
        </div>
    </div>

```

<!-- Certifications Section -->

```

<div class="section">
    <div class="container">
        <h2>Certifications & Continuous Learning</h2>
        <ul class="certifications">
            <li>Data Science & Machine Learning - DataCamp</li>
            <li>Building LLM Applications with LangChain - Completed</li>
            <li>Advanced Prompt Engineering - OpenAI & Anthropic Documentation</li>
            <li>Deep Learning Specialization - Self-Paced Research & Implementation</li>
            <li>Active contributor to AI/ML research communities and open-source experimentation</li>
        </ul>
    </div>

```

```

        </div>

        <!-- Additional Strengths Section -->
        <div class="section gray-bg">
            <div class="container">
                <h2>Additional Strengths</h2>
                <div class="strengths">
                    <div class="strength-item">
                        <h3>Problem-Solving</h3>
                        <p>Strong analytical skills with focus on model reliability, accuracy, and scalability</p>
                    </div>
                    <div class="strength-item">
                        <h3>Collaboration</h3>
                        <p>Excellent communication abilities and experience working cross-functionally</p>
                    </div>
                    <div class="strength-item">
                        <h3>AI Ethics</h3>
                        <p>Passionate about privacy, security, and responsible AI in autonomous systems</p>
                    </div>
                    <div class="strength-item">
                        <h3>Continuous Learning</h3>
                        <p>Actively exploring emerging AI research in multi-agent systems, real-time reasoning, a</p>
                    </div>
                    <div class="strength-item">
                        <h3>Practical Focus</h3>
                        <p>Proven ability to translate cutting-edge research into production-ready enterprise so</p>
                    </div>
                </div>
            </div>
        </div>

        <!-- Footer -->
        <div class="footer">
            <div class="container">
                <p>&copy; 2026 Chandan Shah. All rights reserved.</p>
            </div>
        </div>
    </body>
</html>

```

style.css

```

/* Basic Styles for Body */
body {
    font-family: Arial, sans-serif;
    background-color: lightgray;
    color: black;
    margin: 0;
    padding: 0;
}

/* Container */
.container {
    width: 90%;
    margin: 0 auto;
    padding: 20px;
}

/* Header */
.header {
    background-color: purple;
    color: white;
    padding: 40px;
    text-align: center;
}

.header h1 {
    font-size: 36px;
    margin-bottom: 10px;
}

.subtitle {

```

```
        font-size: 18px;
        margin-bottom: 20px;
    }

    .contact-info {
        margin-top: 15px;
    }

    .contact-info p {
        margin: 5px;
    }

    .contact-info a {
        color: white;
        text-decoration: underline;
    }

/* Section */
.section {
    padding: 40px 0;
    background-color: white;
}

.gray-bg {
    background-color: #e8e8e8;
}

.section h2 {
    font-size: 28px;
    color: purple;
    margin-bottom: 20px;
    border-bottom: 2px solid purple;
    padding-bottom: 10px;
}

/* Summary */
.summary {
    font-size: 16px;
    line-height: 1.6;
    margin-bottom: 20px;
}

/* Skills */
.skill-category {
    margin-bottom: 20px;
}

.skill-category h3 {
    font-size: 20px;
    color: darkpurple;
    margin-bottom: 10px;
}

.skill-category p {
    font-size: 15px;
    line-height: 1.5;
}

/* Projects */
.project {
    margin-bottom: 30px;
    padding: 20px;
    background-color: #f5f5f5;
    border-left: 3px solid purple;
}

.project h3 {
    font-size: 22px;
    margin-bottom: 10px;
}

.tech-stack {
    color: purple;
    font-weight: bold;
    margin-bottom: 10px;
}

.project ul {
```

```
        margin-left: 25px;
    }

.project li {
    margin-bottom: 8px;
}

/* Education */
.education {
    padding: 15px;
    background-color: white;
}

.education h3 {
    font-size: 22px;
    margin-bottom: 10px;
}

.institution {
    font-size: 16px;
    color: purple;
}

.date {
    font-style: italic;
    color: gray;
    margin-bottom: 10px;
}

/* Certifications */
.certifications {
    margin-left: 25px;
}

.certifications li {
    margin-bottom: 10px;
}

/* Strengths */
.strengths {
    margin-top: 20px;
}

.strength-item {
    margin-bottom: 20px;
    padding: 15px;
    background-color: white;
}

.strength-item h3 {
    font-size: 18px;
    color: purple;
    margin-bottom: 8px;
}

.strength-item p {
    font-size: 14px;
}

/* Footer */
.footer {
    background-color: black;
    color: white;
    text-align: center;
    padding: 25px;
}

.footer p {
    margin: 0;
}
```